

Claims

1. A diagnostic sensor comprising:

detecting means for detecting any of various pathogens existing in a part of a living body and/or body fluid of the living body or a gas emitted from the living body, or an antigen or ligand corresponding to abnormality or disease; and

signal generating means for generating a signal when the detecting means detects any of the pathogens, antigen, or ligand.

2. The diagnostic sensor according to claim 1, wherein the detecting means is formed by applying or attaching an antibody or protein on or near an integrated circuit formed on a semiconductor substrate,

a part to which the antibody or protein is applied or attached and the integrated circuit are electrically connected to each other via a conductor,

the signal generating means is formed in the integrated circuit, and

when a surface acoustic wave current which is generated when the antibody and the antigen bind to each other or the protein and the ligand bind to each other is transmitted via the conductor to the integrated circuit, a signal corresponding to the surface acoustic wave current is transmitted to the outside of the integrated circuit.

3. A diagnostic system using the diagnostic sensor according to claim 1 or 2, comprising:

signal amplifying means for amplifying a signal generated by the diagnostic sensor;

storing means for storing, as a base signal, a signal generated when the diagnostic sensor does not detect a pathogen, antigen, or ligand;

control means; and

display means,

wherein the control means compares a signal generated by the diagnostic sensor with the base signal stored in the storing means, thereby detecting whether or not the signal generated by the diagnostic sensor is a signal generated in the case where a pathogen, antigen, or ligand is detected.

4. A diagnostic system using the diagnostic sensor according to claim 1 or 2 and a computer network, comprising:

reading means provided on a patient side, for reading a signal generated by the diagnostic sensor and generating an electric signal;

a patient-side computer for sending the electric signal from the reading means to the network; and

a diagnosing-side computer for receiving the signal from the reading means sent via the network,

wherein the diagnosing-side computer comprises:

storing means for pre-storing, as a base signal, a signal generated by the reading means in the case where the diagnostic

sensor does not detect a pathogen, antigen, or ligand;

comparing means for comparing the signal sent via the network with the base signal; and

determining means for determining the state of the patient side corresponding to the signal sent via the network on the basis of an output signal of the comparing means.

5. A brassiere formed in such a manner that a housing part for housing the diagnostic sensor according to any one of claims 1 to 4 is formed, and

in the case where abnormality occurs in a mamma, an antigen or ligand as a cause of the abnormality is detected by the diagnostic sensor in the housing part, and the abnormality is notified.